



Calibration Summary

Customer Name: **EPA Centralional Regional Lab (EPA311)**

DWS Sales Order: **109759**

Customer Address: **US Environmental Protection Agency**

Calibration Date: **6/7/2017**

City, State, Zip: **Chicago, IL 60605**

Requested Due Date: **6/20/2018**

<u>Total Systems</u>	<u>Not Found</u>	<u>Out of Service</u>	<u>Returning to DWS</u>		<u>As Found</u>	<u>As Left</u>
18		2		Calibration Failures:	3	

<u>DWS ID#</u>	<u>Customer ID#</u>	<u>Location</u>	<u>Device</u>	<u>Serial Number</u>	<u>Capacity</u>	<u>As Found</u>	<u>As Left</u>	<u>DWS Note</u>
001A	16	RM 1033	Sartorius MSU324S CUBIS	26709090	320 x 0.0001 g	Pass	Pass	A04 200 100 20 (g)
Comments: 16								
002A	17	RM 1033	Sartorius MSU324S CUBIS	26709091	320 x 0.0001 g	Pass	Pass	A04 200 100 20 (g)
Comments: 17								
003A	18	RM 1003	Sartorius MSU324S CUBIS	26709092	320 x 0.0001 g	Pass	Pass	A04 200 100 20 (g)
Comments: 18								
004A	21	RM 1036	Sartorius MSU324S CUBIS	25106130	320 x 0.0001 g	Pass	Pass	A04 200 100 20 (g)
Comments: 21								
008A	1	RM 1035	Mettler-Toledo AB 104-S	1121330659	100 x 0.0001 g	Fail	Pass	A04 100 50 10 (g)
Comments: CHAMBER TOP GLASS BROKEN 1								
009A	4	RM 1016	Mettler-Toledo AG285	1120181846	210 x 0.0001 g			A04 (g)
Comments: N/F 6/2015 AG								
011A	6	RM 1003	Mettler-Toledo AG285	1120181838	210 x 0.0001 g			A04 (g)
Comments: 6								
014A	7	RM 1007	Mettler-Toledo AX105	1122310644	110 x 0.0001 g	Pass	Pass	A04 100 50 10 (g)
Comments: 7								
017A	784	RM 1014	Mettler-Toledo PM2000	H43784	2100 x 0.01 g	Fail	Pass	A04 2000 1000 100 (g)
Comments: 784								

Summary 1 of 2

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

Customer Name: EPA Central Regional Lab (EPA311)

DWS Sales Order: 109759

DWS ID#	Customer ID#	Location	Device	Serial Number	Capacity	As Found	As Left	DWS Note
018A	8	RM 1033	A&D HF2000	12840548	2100 x 0.01 g	Fail	Pass	A04 2000 1000 100 (g)
Comments: 8								
019A	10	RM 1010	A&D GX400	14525320	410 x 0.001 g	Pass	Pass	A04 400 200 50 (g)
Comments: 10								
020A	94	RM 1014	METTLER TOLED0	XA32001LB136224094	32100 x 0.1 g	Pass	Pass	A04 30000 10000 5000 (g)
Comments: 94								
024A	22	RM 1014	Mettler-Toledo	PM400 L72332	400 x 0.01 g	Pass	Pass	A04 400 200 50 (g)
Comments: 22								
026A	12	RM 1004	Sartorius CPA124S	26650025	120 x 0.0001 g	Pass	Pass	A04 100 50 10 (g)
Comments: 12								
027A	13	RM 1004	Sartorius CPA124S	25150424	120 x 0.0001 g	Pass	Pass	A04 100 50 10 (g)
Comments: 13								
028A	26		Sartorius Secura224-1S	32150046	220 x 0.0001 g	Pass	Pass	A04 200 100 20 (g)
Comments: RM 1014								
029A	25		Sartorius Secura224-1S	32050346	220 x 0.0001 g	Pass	Pass	A04 200 100 20 (g)
Comments: RM 1014								
030A			Sartorius MSE2202S-100-00	33110477	2200 x 0.01 g	Pass	Pass	A04 2000 1000 100 (g)
Comments: RM 1033								

Summary 2 of 2

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

Calibration Certificate

Certificate Number: **42902406-1**
 Customer Name: **EPA Centronational Regional Lab**
 Customer Address: **US Environmental Protection Agency**
Chicago, IL 60605
 Customer Code: **EPA311**
 Device Location: **RM 1033**

DWS Sales Order: **109759**
 Test Location: **Customer Site**
 Calibration Procedure: **A04L**
 Calibration Date: **06/07/17**
6/20/2018

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
001A	16	Device Under Test:	Sartorius	MSU324S CUBIS	26709090	320 x 0.0001 g

Span Test

Test Load	Tolerance	As Found	Status	As Left	Status	+/- (Uc) K=2(≈95%)
200 g	0.002 g	199.9999 g	Pass	199.9999 g	Pass	0.0013 g
100 g	0.001 g	100 g	Pass	100 g	Pass	0.0008 g *
20 g	0.0002 g	20 g	Pass	20 g	Pass	0.0008 g *

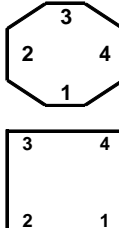
* DWS Best Scope Uc value utilized

Tolerance: +/- 0.001% of applied load or +/- Resolution (x2), which ever is greater

Off-Center Load Test

Test Load: 100 g Tolerance: 0.001 g

As Found	As Left
1 0.0000 g	0.0000 g
2 0.0000 g	0.0000 g
3 0.0001 g	0.0001 g
4 0.0000 g	0.0000 g
Max Error 0.0001 g	Max Error 0.0001 g
Status Pass	Status Pass



Repeatability Test

Test Load: 100 g

As Left
1 100.0000 g
2 100.0000 g
3 100.0000 g
Standard Deviation 0 g

DWS Standards Utilized

Serial Number	Certificate	Last Cal	Next Cal
094K	2533150C	01/25/17	01/31/18
0U2T	2564892F	03/20/17	03/31/19
S5000	2555591A	02/27/17	02/28/18
1GEC	2397243A	02/09/16	02/28/18

Data Weighing Systems certifies the following equipment was tested and calibrated with standards traceable through NIST to the International System of Units (SI). Subject standards meet the tolerance requirements ASTM E617 (Table 1.0), or NIST HB 105-1 (Table 2-Metric), (Table 3-Avoirdupois) or (Table 4-Apothecary). The determination of a Pass/Fail condition is the opinion of DWS based on experience and established procedures. Measurement Uncertainty is not considered in this determination. Measurement Uncertainty K=2 (≈95%). This form not to be duplicated without written permission of DWS.

Calibration performed, verified functionality and adjusted as appropriate for measurement errors.

Technician Comment:

Equipment Comment: **16**

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s): **Adrian Garcia**

DWS Quality Manager
or delegate, review and approval:

Stan P. Hume

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

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Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

Calibration Certificate

Certificate Number: 42902406-2

DWS Sales Order: 109759

Customer Name: EPA Centronational Regional Lab

Test Location: Customer Site

Customer Address: US Environmental Protection Agency
Chicago, IL 60605

Calibration Procedure: A04L

Customer Code: EPA311

Calibration Date: 06/07/17

Device Location: RM 1033

6/20/2018

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
002A	17	Device Under Test:	Sartorius	MSU324S CUBIS	26709091	320 x 0.0001 g

Span Test

Test Load	Tolerance	As Found	Status	As Left	Status	+/- (Uc) K=2(≈95%)
200 g	0.002 g	199.9998 g	Pass	200 g	Pass	0.0013 g
100 g	0.001 g	100 g	Pass	100 g	Pass	0.0008 g *
20 g	0.0002 g	20 g	Pass	20 g	Pass	0.0008 g *

* DWS Best Scope Uc value utilized

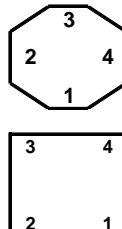
Tolerance: +/- 0.001% of applied load or +/- Resolution (x2), which ever is greater

Off-Center Load Test

Test Load: 100 g

Tolerance: 0.001 g

	As Found	As Left
1	0.0000 g	0.0000 g
2	0.0000 g	0.0000 g
3	0.0000 g	0.0000 g
4	0.0000 g	0.0000 g
	Max Error	Max Error
	0.0000 g	0.0000 g
	Status	Status
	Pass	Pass



Repeatability Test

Test Load: 100 g

	As Left
1	100.0000 g
2	99.9999 g
3	100.0000 g

Standard Deviation
0.00005774 g

DWS Standards Utilized

Serial Number	Certificate	Last Cal	Next Cal
094K	2533150C	01/25/17	01/31/18
0U2T	2564892F	03/20/17	03/31/19
S5000	2555591A	02/27/17	02/28/18
1GEC	2397243A	02/09/16	02/28/18

Data Weighing Systems certifies the following equipment was tested and calibrated with standards traceable through NIST to the International System of Units (SI). Subject standards meet the tolerance requirements ASTM E617 (Table 1.0), or NIST HB 105-1 (Table 2-Metric), (Table 3-Avoirdupois) or (Table 4-Apothecary). The determination of a Pass/Fail condition is the opinion of DWS based on experience and established procedures. Measurement Uncertainty is not considered in this determination. Measurement Uncertainty K=2 (≈95%). This form not to be duplicated without written permission of DWS.

Calibration performed, verified functionality and adjusted as appropriate for measurement errors.

Technician Comment:

Equipment Comment: 17

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s): Adrian Garcia

DWS Quality Manager
or delegate, review and approval:

Stan P. Hume

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Page 1 of 1

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

Calibration Certificate

Certificate Number: **42902406-3**
Customer Name: **EPA Centronational Regional Lab**
Customer Address: **US Environmental Protection Agency**
Chicago, IL 60605
Customer Code: **EPA311**
Device Location: **RM 1003**

DWS Sales Order: **109759**
Test Location: **Customer Site**
Calibration Procedure: **A04L**
Calibration Date: **06/07/17**
6/20/2018

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
003A	18	Device Under Test:	Sartorius	MSU324S CUBIS	26709092	320 x 0.0001 g

Span Test

Test Load	Tolerance	As Found	Status	As Left	Status	+/- (Uc) K=2(≈95%)
200 g	0.002 g	200.0001 g	Pass	200 g	Pass	0.0013 g
100 g	0.001 g	100 g	Pass	100 g	Pass	0.0008 g *
20 g	0.0002 g	20 g	Pass	20 g	Pass	0.0008 g *

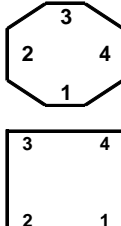
* DWS Best Scope Uc value utilized

Tolerance: +/- 0.001% of applied load or +/- Resolution (x2), which ever is greater

Off-Center Load Test

Test Load: 100 g Tolerance: 0.001 g

As Found	As Left
1 0.0000 g	0.0000 g
2 0.0000 g	0.0000 g
3 0.0000 g	0.0000 g
4 0.0000 g	0.0000 g
Max Error 0.0000 g	Max Error 0.0000 g
Status Pass	Status Pass



Repeatability Test

Test Load: 100 g

As Left
1 100.0000 g
2 100.0000 g
3 100.0001 g
Standard Deviation 0.00005774 g

DWS Standards Utilized

Serial Number	Certificate	Last Cal	Next Cal
094K	2533150C	01/25/17	01/31/18
0U2T	2564892F	03/20/17	03/31/19
S5000	2555591A	02/27/17	02/28/18
1GEC	2397243A	02/09/16	02/28/18

Data Weighing Systems certifies the following equipment was tested and calibrated with standards traceable through NIST to the International System of Units (SI). Subject standards meet the tolerance requirements ASTM E617 (Table 1.0), or NIST HB 105-1 (Table 2-Metric), (Table 3-Avoirdupois) or (Table 4-Apothecary). The determination of a Pass/Fail condition is the opinion of DWS based on experience and established procedures. Measurement Uncertainty is not considered in this determination. Measurement Uncertainty K=2 (≈95%). This form not to be duplicated without written permission of DWS.

Calibration performed, verified functionality and adjusted as appropriate for measurement errors.

Technician Comment:

Equipment Comment: 18

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s): Adrian Garcia

DWS Quality Manager
or delegate, review and approval:



Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Page 1 of 1

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

Calibration Certificate

Certificate Number: **42902406-4**
 Customer Name: **EPA Centratonal Regional Lab**
 Customer Address: **US Environmental Protection Agency**
Chicago, IL 60605
 Customer Code: **EPA311**
 Device Location: **RM 1036**

DWS Sales Order: **109759**
 Test Location: **Customer Site**
 Calibration Procedure: **A04L**
 Calibration Date: **06/07/17**
6/20/2018

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
004A	21	Device Under Test:	Sartorius	MSU324S CUBIS	25106130	320 x 0.0001 g

Span Test

Test Load	Tolerance	As Found	Status	As Left	Status	+/- (Uc) K=2(≈95%)
200 g	0.002 g	200.0001 g	Pass	200 g	Pass	0.0013 g
100 g	0.001 g	99.9997 g	Pass	100 g	Pass	0.0008 g *
20 g	0.0002 g	20 g	Pass	20 g	Pass	0.0008 g *

* DWS Best Scope Uc value utilized

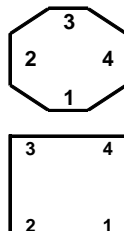
Tolerance: +/- 0.001% of applied load or +/- Resolution (x2), which ever is greater

Off-Center Load Test

Test Load: 100 g

Tolerance: 0.001 g

	As Found	As Left
1	0.0000 g	0.0000 g
2	0.0000 g	0.0000 g
3	0.0001 g	0.0000 g
4	0.0000 g	0.0000 g
	Max Error	Max Error
	0.0001 g	0.0000 g
	Status	Status
	Pass	Pass



Repeatability Test

Test Load: 100 g

	As Left
1	100.0000 g
2	100.0000 g
3	100.0000 g

Standard Deviation
 0 g

DWS Standards Utilized

Serial Number	Certificate	Last Cal	Next Cal
094K	2533150C	01/25/17	01/31/18
0U2T	2564892F	03/20/17	03/31/19
S5000	2555591A	02/27/17	02/28/18
1GEC	2397243A	02/09/16	02/28/18

Data Weighing Systems certifies the following equipment was tested and calibrated with standards traceable through NIST to the International System of Units (SI). Subject standards meet the tolerance requirements ASTM E617 (Table 1.0), or NIST HB 105-1 (Table 2-Metric), (Table 3-Avoirdupois) or (Table 4-Apothecary). The determination of a Pass/Fail condition is the opinion of DWS based on experience and established procedures. Measurement Uncertainty is not considered in this determination. Measurement Uncertainty K=2 (≈95%). This form not to be duplicated without written permission of DWS.

Calibration performed, verified functionality and adjusted as appropriate for measurement errors.

Technician Comment:

Equipment Comment: 21

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s): Adrian Garcia

DWS Quality Manager
 or delegate, review and approval:

Stan P. Hume

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Page 1 of 1

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

FAIL CONDITIONS RECORDED
Calibration Certificate

Certificate Number: 42902406-5

DWS Sales Order: 109759

Customer Name: EPA Centratonal Regional Lab

Test Location: Customer Site

Customer Address: US Environmental Protection Agency
 Chicago, IL 60605

Calibration Procedure: A04L

Customer Code: EPA311

Calibration Date: 06/07/17

Device Location: RM 1035

6/20/2018

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
008A	1	Device Under Test:	Mettler-Toledo	AB 104-S	1121330659	100 x 0.0001 g

Span Test

Test Load	Tolerance	As Found	Status	As Left	Status	+/- (Uc) K=2(≈95%)
100 g	0.001 g	99.9981 g	Fail	100.0001 g	Pass	0.0008 g *
50 g	0.0005 g	49.9996 g	Pass	50 g	Pass	0.0008 g *
10 g	0.0002 g	9.9999 g	Pass	10 g	Pass	0.0008 g *

* DWS Best Scope Uc value utilized

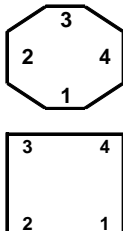
Tolerance: +/- 0.001% of applied load or +/- Resolution (x2), which ever is greater

Off-Center Load Test

Test Load: 50 g

Tolerance: 0.0005 g

	As Found	As Left
1	0.0000 g	0.0000 g
2	0.0000 g	0.0000 g
3	0.0000 g	0.0000 g
4	0.0000 g	0.0000 g
	Max Error	Max Error
	0.0000 g	0.0000 g
	Status	Status
	Pass	Pass



Repeatability Test

Test Load: 50 g

	As Left
1	50.0000 g
2	50.0001 g
3	50.0000 g

Standard Deviation
 0.00005774 g

DWS Standards Utilized

Serial Number	Certificate	Last Cal	Next Cal
094K	2533150C	01/25/17	01/31/18
0U2T	2564892F	03/20/17	03/31/19
S5000	2555591A	02/27/17	02/28/18
1GEC	2397243A	02/09/16	02/28/18

Data Weighing Systems certifies the following equipment was tested and calibrated with standards traceable through NIST to the International System of Units (SI). Subject standards meet the tolerance requirements ASTM E617 (Table 1.0), or NIST HB 105-1 (Table 2-Metric), (Table 3-Avoirdupois) or (Table 4-Apothecary). The determination of a Pass/Fail condition is the opinion of DWS based on experience and established procedures. Measurement Uncertainty is not considered in this determination. Measurement Uncertainty K=2 (≈95%). This form not to be duplicated without written permission of DWS.

Calibration performed, verified functionality and adjusted as appropriate for measurement errors.

Technician Comment: CHAMBER TOP GLASS BROKEN

Equipment Comment: 1

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s): Adrian Garcia

DWS Quality Manager
 or delegate, review and approval:

Stan P. Hume

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Page 1 of 1

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301



**LABORATORY
ACCREDITATION
BUREAU** a division of A-S-B
ACCREDITED ISO/IEC 17025
Certificate # L1114-1 Calibration

Unit Out of Service-Remove



Certificate Number: **Out of Service**

DWS Sales Order: **109759**

Customer Name: **EPA Centratlional Regional Lab**

Test Location: **Customer Site**

Customer Address: **US Environmental Protection Agency
Chicago, IL 60605**

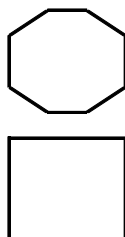
Date: **06/07/17**

Customer Code: **EPA311**

Device Location: **RM 1016**

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
009A	4	Device Under Test:	Mettler-Toledo	AG285	1120181846	210 x 0.0001 g



Technician Comment:

Equipment Comment: **N/F 6/2015 AG**

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s):

REVIEW NOT PERFORMED

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Page 1 of 1

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301



**LABORATORY
ACCREDITATION
BUREAU** a division of A-S-B
ACCREDITED ISO/IEC 17025
Certificate # L1114-1 Calibration

Unit Out of Service-Remove



Certificate Number: **Out of Service**

DWS Sales Order: **109759**

Customer Name: **EPA Centratlional Regional Lab**

Test Location: **Customer Site**

Customer Address: **US Environmental Protection Agency
Chicago, IL 60605**

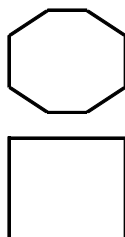
Date: **06/07/17**

Customer Code: **EPA311**

Device Location: **RM 1003**

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
011A	6	Device Under Test:	Mettler-Toledo	AG285	1120181838	210 x 0.0001 g



Technician Comment:

Equipment Comment: **6**

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s):

REVIEW NOT PERFORMED

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Page 1 of 1

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

Calibration Certificate

Certificate Number: 42902406-8

DWS Sales Order: 109759

Customer Name: EPA Centronational Regional Lab

Test Location: Customer Site

Customer Address: US Environmental Protection Agency
 Chicago, IL 60605

Calibration Procedure: A04L

Customer Code: EPA311

Calibration Date: 06/07/17

Device Location: RM 1007

6/20/2018

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
014A	7	Device Under Test:	Mettler-Toledo	AX105	1122310644	110 x 0.0001 g

Span Test

Test Load	Tolerance	As Found	Status	As Left	Status	+/- (Uc) K=2(≈95%)
100 g	0.001 g	99.9999 g	Pass	99.9999 g	Pass	0.0008 g *
50 g	0.0005 g	50 g	Pass	50 g	Pass	0.0008 g *
10 g	0.0002 g	10 g	Pass	10 g	Pass	0.0008 g *

* DWS Best Scope Uc value utilized

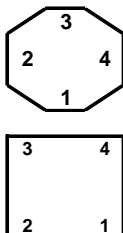
Tolerance: +/- 0.001% of applied load or +/- Resolution (x2), which ever is greater

Off-Center Load Test

Test Load: 50 g

Tolerance: 0.0005 g

	As Found	As Left
1	0.0000 g	0.0000 g
2	0.0001 g	0.0001 g
3	0.0001 g	0.0001 g
4	0.0001 g	0.0001 g
	Max Error	Max Error
	0.0001 g	0.0001 g
	Status	Status
	Pass	Pass



Repeatability Test

Test Load: 50 g

	As Left
1	50.0001 g
2	50.0000 g
3	50.0001 g
	Standard Deviation
	0.00005774 g

DWS Standards Utilized

Serial Number	Certificate	Last Cal	Next Cal
094K	2533150C	01/25/17	01/31/18
0U2T	2564892F	03/20/17	03/31/19
S5000	2555591A	02/27/17	02/28/18
1GEC	2397243A	02/09/16	02/28/18

Data Weighing Systems certifies the following equipment was tested and calibrated with standards traceable through NIST to the International System of Units (SI). Subject standards meet the tolerance requirements ASTM E617 (Table 1.0), or NIST HB 105-1 (Table 2-Metric), (Table 3-Avoirdupois) or (Table 4-Apothecary). The determination of a Pass/Fail condition is the opinion of DWS based on experience and established procedures. Measurement Uncertainty is not considered in this determination. Measurement Uncertainty K=2 (≈95%). This form not to be duplicated without written permission of DWS.

Calibration performed, verified functionality and adjusted as appropriate for measurement errors.

Technician Comment:

Equipment Comment: 7

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s): Adrian Garcia

DWS Quality Manager
or delegate, review and approval:

Stan P. Hume

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Page 1 of 1

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

FAIL CONDITIONS RECORDED Calibration Certificate

Certificate Number: 42902406-9	DWS Sales Order: 109759
Customer Name: EPA Centronational Regional Lab	Test Location: Customer Site
Customer Address: US Environmental Protection Agency	Calibration Procedure: A04L
Chicago, IL 60605	Calibration Date: 06/07/17
Customer Code: EPA311	6/20/2018
Device Location: RM 1014	

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
017A	784	Device Under Test:	Mettler-Toledo	PM2000	H43784	2100 x 0.01 g

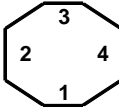
Span Test

Test Load	Tolerance	As Found	Status	As Left	Status	+/- (Uc) K=2(≈95%)
2000 g	0.02 g	2000.03 g	Fail	2000 g	Pass	0.0310 g *
1000 g	0.02 g	1000.02 g	Pass	1000 g	Pass	0.0310 g *
100 g	0.02 g	100 g	Pass	100 g	Pass	0.0310 g *

* DWS Best Scope Uc value utilized

Tolerance: +/- 0.001% of applied load or +/- Resolution (x2), which ever is greater

Off-Center Load Test

Test Load: 1000 g	Tolerance: 0.02 g																		
<table border="0"> <tr> <th>As Found</th> <th>As Left</th> </tr> <tr> <td>1 0.00 g</td> <td>0.00 g</td> </tr> <tr> <td>2 0.00 g</td> <td>0.00 g</td> </tr> <tr> <td>3 0.00 g</td> <td>0.00 g</td> </tr> <tr> <td>4 0.00 g</td> <td>0.00 g</td> </tr> <tr> <td>Max Error</td> <td>Max Error</td> </tr> <tr> <td>0.00 g</td> <td>0.00 g</td> </tr> <tr> <td>Status</td> <td>Status</td> </tr> <tr> <td>Pass</td> <td>Pass</td> </tr> </table>	As Found	As Left	1 0.00 g	0.00 g	2 0.00 g	0.00 g	3 0.00 g	0.00 g	4 0.00 g	0.00 g	Max Error	Max Error	0.00 g	0.00 g	Status	Status	Pass	Pass	
As Found	As Left																		
1 0.00 g	0.00 g																		
2 0.00 g	0.00 g																		
3 0.00 g	0.00 g																		
4 0.00 g	0.00 g																		
Max Error	Max Error																		
0.00 g	0.00 g																		
Status	Status																		
Pass	Pass																		

Repeatability Test

Test Load: 1000 g				
<table border="0"> <tr> <th>As Left</th> </tr> <tr> <td>1 1000.00 g</td> </tr> <tr> <td>2 1000.00 g</td> </tr> <tr> <td>3 1000.00 g</td> </tr> </table>	As Left	1 1000.00 g	2 1000.00 g	3 1000.00 g
As Left				
1 1000.00 g				
2 1000.00 g				
3 1000.00 g				
Standard Deviation				
0 g				

DWS Standards Utilized

Serial Number	Certificate	Last Cal	Next Cal
094K	2533150C	01/25/17	01/31/18
0U2T	2564892F	03/20/17	03/31/19
S5000	2555591A	02/27/17	02/28/18
1GEC	2397243A	02/09/16	02/28/18

Data Weighing Systems certifies the following equipment was tested and calibrated with standards traceable through NIST to the International System of Units (SI). Subject standards meet the tolerance requirements ASTM E617 (Table 1.0), or NIST HB 105-1 (Table 2-Metric), (Table 3-Avoirdupois) or (Table 4-Apothecary). The determination of a Pass/Fail condition is the opinion of DWS based on experience and established procedures. Measurement Uncertainty is not considered in this determination. Measurement Uncertainty K=2 (≈95%). This form not to be duplicated without written permission of DWS.

Calibration performed, verified functionality and adjusted as appropriate for measurement errors.

Technician Comment:

Equipment Comment: **784**

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s): **Adrian Garcia**

DWS Quality Manager
or delegate, review and approval:

Page 1 of 1

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

FAIL CONDITIONS RECORDED
Calibration Certificate

Certificate Number: 42902406-10

DWS Sales Order: 109759

Customer Name: EPA Centratonal Regional Lab

Test Location: Customer Site

Customer Address: US Environmental Protection Agency
 Chicago, IL 60605

Calibration Procedure: A04L

Customer Code: EPA311

Calibration Date: 06/07/17

Device Location: RM 1033

6/20/2018

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
018A	8	Device Under Test:	A&D	HF2000	12840548	2100 x 0.01 g

Span Test

Test Load	Tolerance	As Found	Status	As Left	Status	+/- (Uc) K=2(≈95%)
2000 g	0.02 g	1999.74 g	Fail	1999.99 g	Pass	0.0310 g *
1000 g	0.02 g	999.86 g	Fail	1000 g	Pass	0.0310 g *
100 g	0.02 g	99.98 g	Pass	100 g	Pass	0.0310 g *

* DWS Best Scope Uc value utilized

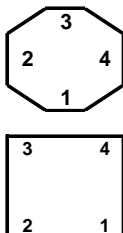
Tolerance: +/- 0.001% of applied load or +/- Resolution (x2), which ever is greater

Off-Center Load Test

Test Load: 1000 g

Tolerance: 0.02 g

	As Found	As Left
1	-0.01 g	0.00 g
2	0.01 g	0.00 g
3	0.03 g	0.01 g
4	0.02 g	0.01 g
	Max Error	Max Error
	0.03 g	0.01 g
	Status	Status
	Fail	Pass



Repeatability Test

Test Load: 1000 g

	As Left
1	1000.00 g
2	1000.00 g
3	1000.00 g
	Standard Deviation
	0 g

DWS Standards Utilized

Serial Number	Certificate	Last Cal	Next Cal
094K	2533150C	01/25/17	01/31/18
0U2T	2564892F	03/20/17	03/31/19
S5000	2555591A	02/27/17	02/28/18
1GEC	2397243A	02/09/16	02/28/18

Data Weighing Systems certifies the following equipment was tested and calibrated with standards traceable through NIST to the International System of Units (SI). Subject standards meet the tolerance requirements ASTM E617 (Table 1.0), or NIST HB 105-1 (Table 2-Metric), (Table 3-Avoirdupois) or (Table 4-Apothecary). The determination of a Pass/Fail condition is the opinion of DWS based on experience and established procedures. Measurement Uncertainty is not considered in this determination. Measurement Uncertainty K=2 (≈95%). This form not to be duplicated without written permission of DWS.

Calibration performed, verified functionality and adjusted as appropriate for measurement errors.

Technician Comment:

Equipment Comment: 8

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s): Adrian Garcia

DWS Quality Manager
or delegate, review and approval:

Stan P. Hume

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Page 1 of 1

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

Calibration Certificate

Certificate Number: 42902406-11

DWS Sales Order: 109759

Customer Name: EPA Centronational Regional Lab

Test Location: Customer Site

Customer Address: US Environmental Protection Agency
 Chicago, IL 60605

Calibration Procedure: A04L

Customer Code: EPA311

Calibration Date: 06/07/17

6/20/2018

Device Location: RM 1010

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
019A	10	Device Under Test:	A&D	GX400	14525320	410 x 0.001 g

Span Test

Test Load	Tolerance	As Found	Status	As Left	Status	+/- (Uc) K=2(≈95%)
400 g	0.004 g	400.001 g	Pass	400 g	Pass	0.0031 g
200 g	0.002 g	200 g	Pass	200 g	Pass	0.0021 g
50 g	0.002 g	49.999 g	Pass	50 g	Pass	0.0017 g

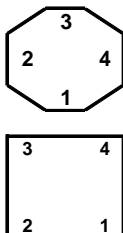
Tolerance: +/- 0.001% of applied load or +/- Resolution (x2), which ever is greater

Off-Center Load Test

Test Load: 200 g

Tolerance: 0.002 g

	As Found	As Left
1	-0.001 g	-0.001 g
2	0.002 g	0.002 g
3	0.002 g	0.002 g
4	0.001 g	0.001 g
	Max Error	Max Error
	0.002 g	0.002 g
	Status	Status
	Pass	Pass



Repeatability Test

Test Load: 200 g

	As Left
1	200.001 g
2	200.000 g
3	200.000 g
	Standard Deviation
	0.0005774 g

DWS Standards Utilized

Serial Number	Certificate	Last Cal	Next Cal
094K	2533150C	01/25/17	01/31/18
0U2T	2564892F	03/20/17	03/31/19
S5000	2555591A	02/27/17	02/28/18
1GEC	2397243A	02/09/16	02/28/18

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Calibration performed, verified functionality and adjusted as appropriate for measurement errors.

Technician Comment:

Equipment Comment: 10

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s): Adrian Garcia

DWS Quality Manager
or delegate, review and approval:

Stan P. Hume

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Page 1 of 1

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

Calibration Certificate

Certificate Number: **42902406-12**

DWS Sales Order: **109759**

Customer Name: **EPA Centronational Regional Lab**

Test Location: **Customer Site**

Customer Address: **US Environmental Protection Agency
Chicago, IL 60605**

Calibration Procedure: **A04L**

Customer Code: **EPA311**

Calibration Date: **06/07/17**

Device Location: **RM 1014**

6/20/2018

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
020A	94	Device Under Test:	METTLER TOLED	XA32001L	B136224094	32100 x 0.1 g

Span Test

Test Load	Tolerance	As Found	Status	As Left	Status	+/- (Uc) K=2(≈95%)
30000 g	0.3 g	30000.1 g	Pass	30000 g	Pass	0.3000 g *
10000 g	0.2 g	10000 g	Pass	10000 g	Pass	0.3000 g *
5000 g	0.2 g	5000 g	Pass	5000 g	Pass	0.3000 g *

* DWS Best Scope Uc value utilized

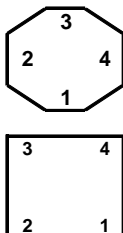
Tolerance: +/- 0.001% of applied load or +/- Resolution (x2), which ever is greater

Off-Center Load Test

Test Load: 10000 g

Tolerance: 0.2 g

	As Found	As Left
1	0.0 g	0.0 g
2	0.0 g	0.0 g
3	0.0 g	0.0 g
4	0.0 g	0.0 g
	Max Error	Max Error
	0.0 g	0.0 g
	Status	Status
	Pass	Pass



Repeatability Test

Test Load: 10000 g

	As Left
1	10000.0 g
2	10000.0 g
3	10000.0 g
	Standard Deviation
	0 g

DWS Standards Utilized

Serial Number	Certificate	Last Cal	Next Cal
094K	2533150C	01/25/17	01/31/18
0U2T	2564892F	03/20/17	03/31/19
S5000	2555591A	02/27/17	02/28/18
1GEC	2397243A	02/09/16	02/28/18

Data Weighing Systems certifies the following equipment was tested and calibrated with standards traceable through NIST to the International System of Units (SI). Subject standards meet the tolerance requirements ASTM E617 (Table 1.0), or NIST HB 105-1 (Table 2-Metric), (Table 3-Avoirdupois) or (Table 4-Apothecary). The determination of a Pass/Fail condition is the opinion of DWS based on experience and established procedures. Measurement Uncertainty is not considered in this determination. Measurement Uncertainty K=2 (≈95%). This form not to be duplicated without written permission of DWS.

Calibration performed, verified functionality and adjusted as appropriate for measurement errors.

Technician Comment:

Equipment Comment: **94**

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s): **Adrian Garcia**

DWS Quality Manager
or delegate, review and approval:

Stan P. Hume

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Page 1 of 1

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

Calibration Certificate

Certificate Number: 42902406-13

DWS Sales Order: 109759

Customer Name: EPA Central Regional Lab

Test Location: Customer Site

Customer Address: US Environmental Protection Agency
 Chicago, IL 60605

Calibration Procedure: A04L

Customer Code: EPA311

Calibration Date: 06/07/17

6/20/2018

Device Location: RM 1014

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
024A	22	Device Under Test:	Mettler-Toledo	PM400	L72332	400 x 0.01 g

Span Test

Test Load	Tolerance	As Found	Status	As Left	Status	+/- (Uc) K=2(≈95%)
400 g	0.02 g	400 g	Pass	400 g	Pass	0.0119 g
200 g	0.02 g	200 g	Pass	200 g	Pass	0.0116 g
50 g	0.02 g	50 g	Pass	50 g	Pass	0.0116 g

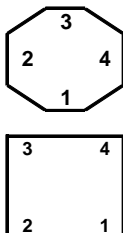
Tolerance: +/- 0.001% of applied load or +/- Resolution (x2), which ever is greater

Off-Center Load Test

Test Load: 200 g

Tolerance: 0.02 g

	As Found	As Left
1	0.00 g	0.00 g
2	0.01 g	0.01 g
3	-0.01 g	-0.01 g
4	0.00 g	0.00 g
	Max Error	Max Error
	0.01 g	0.01 g
	Status	Status
	Pass	Pass



Repeatability Test

Test Load: 200 g

	As Left
1	200.00 g
2	200.00 g
3	200.00 g
	Standard Deviation
	0 g

DWS Standards Utilized

Serial Number	Certificate	Last Cal	Next Cal
094K	2533150C	01/25/17	01/31/18
0U2T	2564892F	03/20/17	03/31/19
S5000	2555591A	02/27/17	02/28/18
1GEC	2397243A	02/09/16	02/28/18

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Calibration performed, verified functionality and adjusted as appropriate for measurement errors.

Technician Comment:

Equipment Comment: 22

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s): Adrian Garcia

DWS Quality Manager
or delegate, review and approval:

Stan P. Hume

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Page 1 of 1

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

Calibration Certificate

Certificate Number: **42902406-14**
 Customer Name: **EPA Centronational Regional Lab**
 Customer Address: **US Environmental Protection Agency**
Chicago, IL 60605
 Customer Code: **EPA311**
 Device Location: **RM 1004**

DWS Sales Order: **109759**
 Test Location: **Customer Site**
 Calibration Procedure: **A04L**
 Calibration Date: **06/07/17**
6/20/2018

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
026A	12	Device Under Test:	Sartorius	CPA124S	26650025	120 x 0.0001 g

Span Test

Test Load	Tolerance	As Found	Status	As Left	Status	+/- (Uc) K=2(≈95%)
100 g	0.001 g	100.0001 g	Pass	100 g	Pass	0.0008 g *
50 g	0.0005 g	50 g	Pass	50 g	Pass	0.0008 g *
10 g	0.0002 g	10 g	Pass	10 g	Pass	0.0008 g *

* DWS Best Scope Uc value utilized

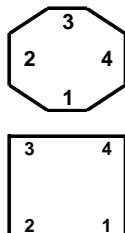
Tolerance: +/- 0.001% of applied load or +/- Resolution (x2), which ever is greater

Off-Center Load Test

Test Load: 50 g

Tolerance: 0.0005 g

	As Found	As Left
1	0.0001 g	0.0000 g
2	0.0000 g	0.0000 g
3	0.0000 g	0.0000 g
4	0.0000 g	0.0000 g
	Max Error	Max Error
	0.0001 g	0.0000 g
	Status	Status
	Pass	Pass



Repeatability Test

Test Load: 50 g

	As Left
1	50.0000 g
2	50.0000 g
3	50.0001 g
	Standard Deviation
	0.00005774 g

DWS Standards Utilized

Serial Number	Certificate	Last Cal	Next Cal
094K	2533150C	01/25/17	01/31/18
0U2T	2564892F	03/20/17	03/31/19
S5000	2555591A	02/27/17	02/28/18
1GEC	2397243A	02/09/16	02/28/18

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Calibration performed, verified functionality and adjusted as appropriate for measurement errors.

Technician Comment:

Equipment Comment: **12**

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s): **Adrian Garcia**

DWS Quality Manager
or delegate, review and approval:

Stan P. Hume

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Page 1 of 1

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

Calibration Certificate

Certificate Number: 42902406-15

DWS Sales Order: 109759

Customer Name: EPA Centratonal Regional Lab

Test Location: Customer Site

Customer Address: US Environmental Protection Agency
 Chicago, IL 60605

Calibration Procedure: A04L

Customer Code: EPA311

Calibration Date: 06/07/17

Device Location: RM 1004

6/20/2018

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
027A	13	Device Under Test:	Sartorius	CPA124S	25150424	120 x 0.0001 g

Span Test

Test Load	Tolerance	As Found	Status	As Left	Status	+/- (Uc) K=2(≈95%)
100 g	0.001 g	100 g	Pass	100 g	Pass	0.0008 g *
50 g	0.0005 g	50 g	Pass	50 g	Pass	0.0008 g *
10 g	0.0002 g	10 g	Pass	10 g	Pass	0.0008 g *

* DWS Best Scope Uc value utilized

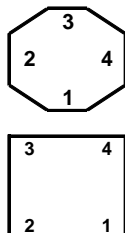
Tolerance: +/- 0.001% of applied load or +/- Resolution (x2), which ever is greater

Off-Center Load Test

Test Load: 50 g

Tolerance: 0.0005 g

	As Found	As Left
1	0.0000 g	0.0000 g
2	0.0000 g	0.0000 g
3	0.0000 g	0.0000 g
4	0.0000 g	0.0000 g
	Max Error	Max Error
	0.0000 g	0.0000 g
	Status	Status
	Pass	Pass



Repeatability Test

Test Load: 50 g

	As Left
1	50.0000 g
2	50.0000 g
3	50.0000 g

Standard Deviation
 0 g

DWS Standards Utilized

Serial Number	Certificate	Last Cal	Next Cal
094K	2533150C	01/25/17	01/31/18
0U2T	2564892F	03/20/17	03/31/19
S5000	2555591A	02/27/17	02/28/18
1GEC	2397243A	02/09/16	02/28/18

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Calibration performed, verified functionality and adjusted as appropriate for measurement errors.

Technician Comment:

Equipment Comment: 13

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s): Adrian Garcia

DWS Quality Manager
 or delegate, review and approval:

Stan P. Hume

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Page 1 of 1

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

Calibration Certificate

Certificate Number: 42902406-16

DWS Sales Order: 109759

Customer Name: EPA Centronational Regional Lab

Test Location: Customer Site

Customer Address: US Environmental Protection Agency
 Chicago, IL 60605

Calibration Procedure: A04L

Calibration Date: 06/07/17

Customer Code: EPA311

6/20/2018

Device Location:

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
028A	26	Device Under Test:	Sartorius	Secura224-1S	32150046	220 x 0.0001 g

Span Test

Test Load	Tolerance	As Found	Status	As Left	Status	+/- (Uc) K=2(≈95%)
200 g	0.002 g	200.0002 g	Pass	200 g	Pass	0.0013 g
100 g	0.001 g	100 g	Pass	100 g	Pass	0.0008 g *
20 g	0.0002 g	19.9999 g	Pass	20 g	Pass	0.0008 g *

* DWS Best Scope Uc value utilized

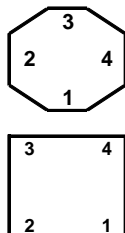
Tolerance: +/- 0.001% of applied load or +/- Resolution (x2), which ever is greater

Off-Center Load Test

Test Load: 100 g

Tolerance: 0.001 g

	As Found	As Left
1	0.0000 g	0.0000 g
2	0.0000 g	0.0000 g
3	0.0000 g	0.0000 g
4	0.0000 g	0.0000 g
	Max Error	Max Error
	0.0000 g	0.0000 g
	Status	Status
	Pass	Pass



Repeatability Test

Test Load: 100 g

	As Left
1	100.0000 g
2	100.0000 g
3	100.0001 g

Standard Deviation
 0.00005774 g

DWS Standards Utilized

Serial Number	Certificate	Last Cal	Next Cal
094K	2533150C	01/25/17	01/31/18
0U2T	2564892F	03/20/17	03/31/19
S5000	2555591A	02/27/17	02/28/18
1GEC	2397243A	02/09/16	02/28/18

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Calibration performed, verified functionality and adjusted as appropriate for measurement errors.

Technician Comment:

Equipment Comment: RM 1014

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s): Adrian Garcia

DWS Quality Manager
 or delegate, review and approval:

Stan P. Hume

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

Page 1 of 1

Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

Calibration Certificate

Certificate Number: 42902406-17

DWS Sales Order: 109759

Customer Name: EPA Centronational Regional Lab

Test Location: Customer Site

Customer Address: US Environmental Protection Agency
 Chicago, IL 60605

Calibration Procedure: A04L

Calibration Date: 06/07/17

Customer Code: EPA311

6/20/2018

Device Location:

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
029A	25	Device Under Test:	Sartorius	Secura224-1S	32050346	220 x 0.0001 g

Span Test

Test Load	Tolerance	As Found	Status	As Left	Status	+/- (Uc) K=2(≈95%)
200 g	0.002 g	200.0006 g	Pass	200 g	Pass	0.0013 g
100 g	0.001 g	100.0004 g	Pass	100 g	Pass	0.0008 g *
20 g	0.0002 g	20.0001 g	Pass	20 g	Pass	0.0008 g *

* DWS Best Scope Uc value utilized

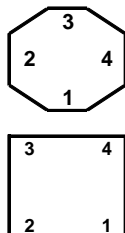
Tolerance: +/- 0.001% of applied load or +/- Resolution (x2), which ever is greater

Off-Center Load Test

Test Load: 100 g

Tolerance: 0.001 g

	As Found	As Left
1	0.0001 g	0.0000 g
2	0.0000 g	0.0000 g
3	0.0000 g	0.0000 g
4	-0.0001 g	0.0000 g
	Max Error	Max Error
	0.0001 g	0.0000 g
	Status	Status
	Pass	Pass



Repeatability Test

Test Load: 100 g

	As Left
1	100.0000 g
2	100.0000 g
3	100.0000 g

Standard Deviation
 0 g

DWS Standards Utilized

Serial Number	Certificate	Last Cal	Next Cal
094K	2533150C	01/25/17	01/31/18
0U2T	2564892F	03/20/17	03/31/19
S5000	2555591A	02/27/17	02/28/18
1GEC	2397243A	02/09/16	02/28/18

Data Weighing Systems certifies the following equipment was tested and calibrated with standards traceable through NIST to the International System of Units (SI). Subject standards meet the tolerance requirements ASTM E617 (Table 1.0), or NIST HB 105-1 (Table 2-Metric), (Table 3-Avoirdupois) or (Table 4-Apothecary). The determination of a Pass/Fail condition is the opinion of DWS based on experience and established procedures. Measurement Uncertainty is not considered in this determination. Measurement Uncertainty K=2 (≈95%). This form not to be duplicated without written permission of DWS.

Calibration performed, verified functionality and adjusted as appropriate for measurement errors.

Technician Comment:

Equipment Comment: RM 1014

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s): Adrian Garcia

DWS Quality Manager
 or delegate, review and approval:

Stan P. Hume

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

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Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301

Calibration Certificate

Certificate Number: 42902406-18

DWS Sales Order: 109759

Customer Name: EPA Centronational Regional Lab

Test Location: Customer Site

Customer Address: US Environmental Protection Agency
Chicago, IL 60605

Calibration Procedure: A04L

Calibration Date: 06/07/17

Customer Code: EPA311

6/20/2018

Device Location:

Customer Equipment

DWS ID#	Customer ID#	Type of Device	Manufacturer	Model	Serial Number	Capacity
030A		Device Under Test:	Sartorius	MSE2202S-100-00	33110477	2200 x 0.01 g

Span Test

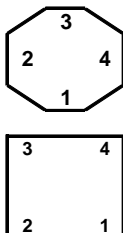
Test Load	Tolerance	As Found	Status	As Left	Status	+/- (Uc) K=2(≈95%)
2000 g	0.02 g	2000 g	Pass	2000 g	Pass	0.0310 g *
1000 g	0.02 g	1000 g	Pass	1000 g	Pass	0.0310 g *
100 g	0.02 g	100 g	Pass	100 g	Pass	0.0310 g *

* DWS Best Scope Uc value utilized

Tolerance: +/- 0.001% of applied load or +/- Resolution (x2), which ever is greater

Off-Center Load Test

Test Load: 1000 g	Tolerance: 0.02 g
As Found	As Left
1 0.00 g	0.00 g
2 0.00 g	0.00 g
3 0.00 g	0.00 g
4 0.00 g	0.00 g
Max Error	Max Error
0.00 g	0.00 g
Status	Status
Pass	Pass



Repeatability Test

Test Load: 1000 g
As Left
1 1000.00 g
2 1000.00 g
3 1000.00 g
Standard Deviation
0 g

DWS Standards Utilized

Serial Number	Certificate	Last Cal	Next Cal
094K	2533150C	01/25/17	01/31/18
0U2T	2564892F	03/20/17	03/31/19
S5000	2555591A	02/27/17	02/28/18
1GEC	2397243A	02/09/16	02/28/18

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Calibration performed, verified functionality and adjusted as appropriate for measurement errors.

Technician Comment:

Equipment Comment: RM 1033

DWS seeks your feedback, please email our quality department: quality@dataweigh.com

DWS Calibration Technician(s): Adrian Garcia

DWS Quality Manager
or delegate, review and approval:

Stan P. Hume

Data Weighing Systems - 2100 Landmeier Rd - Elk Grove Village IL 60007

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Calibration: 1 (847) 437-8106

Website: www.dataweight.com

Sales: 1 (800) 397-6301